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Strategic Planning Department
June, 1990



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#### CENTRAL AREA RESIDENT TRAVEL SURVEY

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#### INTRODUCTION

The purpose of this survey is to explore the travel behavior and preferences of persons who reside in downtown Chicago. This population is of particular interest because it represents a new, rapidly growing transit market that has not been studied relative to transit issues until recently.\*

According to the City Department of Planning, more than 21,000 residential units opened during the past decade (projected through end of 1990). This translates into a gross annual housing production of 1,750 units. By the end of 1990, the downtown housing stock will stand at more than 66,400 units, a 36 percent increase since 1980. By contrast, the downtown residential stock grew by only 2.5 percent - 1,684 units - between 1970 and 1980.

Studios and one-bedroom units comprise 73 percent of the total downtown residential supply. Seventy percent of these units are rentals.

#### METHODOLOGY

In order to obtain desired travel behavior data, a 6-page mail-back questionnaire (Attachment A) was designed in cooperation with Simmons Market Research of Tampa, Florida. Four thousand surveys were distributed among 13 Central Area residential complexes (see Figure 1). For purposes of this study, this area is bounded by Roosevelt Road, Halsted St., North Ave. and Lake Michigan. Various distribution arrangements were worked out with individual building managers. A dollar bill and a postage-paid return envelope were included with each questionnaire to maximize response rates.

In general, buildings were selected with a view toward even dispersal throughout the area. Five sub-areas are distinguished: East Side, LaSalle/Division, Streeterville, South Loop, and Presidential Towers.

The survey response rate was quite high, about 45 percent overall, and the survey did yield the basic origin/destination travel data desired relative to the most important trip type for most people, the work trip. Table 1 summarizes the survey return results. In general, surveys were initially distributed to every third or fourth apartment in each complex.

<sup>\*</sup> The Chicago Area Transportation Study has also surveyed Central Area residents; see <u>CATS Household Travel Survey</u>: <u>Documentation for the Chicago Central Business District</u>, September, 1989.

Figure 1
Residential Developments included in survey



TABLE 1
SURVEY DISTRIBUTION AND RESPONSE RATES

Residential	Surveys	Ret	urns	
Development	Distributed	Number	Percent	
East Side				
Harbor Point	311	148	47.6%	
Outer Drive East	343	164	47.8	
8uckingham Plaza	159	84	52.8	
North Harbor Tower	241	104	43.1	
Presidential Towers	950	361	38.0	
South Loop				
Dearborn Park	419	241	57.5	
Burnham Plaza	125	52	41.6	
River City	226	95	42.0	
Transportation Bldg.	150	56	37.3	
LaSalle/Division				
Atrium Village	300	110	36.7	
Cobbler Square	268	140	52.1	
Streeterville				
Ontario Place	250	95	38.0	
Onterie Center	258	135	52.3	
TOTAL DISTRIBUTED	4,000	1,797	44.9	

#### DEMOGRAPHIC PROFILES

The survey collected demographic data on five factors of primary interest; age of respondent, income, household size, household composition and race. Table 2 summarizes these data for the 5 sub-areas.

#### Household size

As would be expected, given the predominance of studio and one-bedroom units, household size was small, with an overall mean of 1.5 persons. Buckingham Plaza had the highest mean household size at 1.96 persons, followed by Atrium Village and Dearborn Park at 1.84 and 1.72 respectively. Ontario Place had the smallest household size of 1.21.

#### Household Composition

Of 1,797 households responding, only 123 or 6.8 percent reported having children 17 or under. More than half these households were in Dearborn Park, Atrium village or Buckingham Plaza. In the first two cases, this is to be expected, given their unusual configurations including low-rise and/or townhouse units. The presence of Buckingham Plaza, a high-rise apartment tower, in the top three in household size and presence of children is surprising, although the mean is still less than two persons per unit. Outer Drive East had the highest proportion of residents aged 35 or over (85%), followed by Harbor Point (76%) and Buckingham Plaza (74%).

#### Income

Median household income for the sample was \$45,150, a particularly impressive figure given the small household sizes. Highest median was Buckingham Plaza at \$72,900, with 65.5 percent earning \$70,000 or more. Almost 10 percent of respondents had household incomes of \$20,000 or less, mostly reflecting instances where some developers are required to set aside a percentage of units for rent-subsidized tenants as a condition for getting government financing assistance.

Atrium Village had the lowest median income at \$21,700 (a special case to be discussed later) followed by Burnham Plaza at \$36,250.

#### Race

Overall the sample was 82.6 percent white, 11.4 percent black, 2.7 percent Asian and 1.3 percent Hispanic.

The only building deviating markedly was Burnham Plaza with 44.2 percent black respondents, 51.9 percent white. This building serves as a good example of a well balanced, racially mixed development.

DEMOGRAPHIC PROFILES FOR RESIDENTIAL SUB-AREAS TABLE 2.

Streeterville	1.29	230 8 0.03	45,205	16.1 12.7 12.6 12.0 15.7 26.3	1.7 8.5 1.8 86.0 0.4	36.6	0.0 50.5 28.0 9.5	
LaSalle/ Division	1.59	250 26 0.10	32,535	24.9 19.8 14.7 13.1 17.0	1.2 19.6 1.3 76.3	33.1	0.0 60.4 22.2 8.5 8.1	
East Side	1.64	515 45 0.09	53,967	2.20 2.20 2.20 2.50 2.14	0.9 8.5 2.8 86.7	44.3	2.3 30.4 28.6 25.6 6.2	
South	1.57	444 85 0.19	44,353	4.8 15.9 22.2 16.9 16.9	0.8 21.8 2.5 73.6	34.6	0.4 52.3 35.0 10.3 2.0	
Pres. Towers	1.29	361 14 0.04	42,100	6.9 16.1 21.6 13.9 16.1 20.5	2.2 5.3 1.4 89.5 0.3	33.6	0.3 62.3 26.0 9.4 1.4	
Total Sample	1.50	1,797 190 0.11	45,150	9.9 15.1 16.0 25.5	1.3 11.4 2.7 82.6 0.8	36.2	0.2 47.2 29.2 14.4 8.2	
	Mean Hsehld Size	Hsehld Comp. Total Hsehlds Children under 17 Children per Hsehld	Median Hsehld Income	Income Dist. Under 20,000 20,000-30,000 30,000-40,000 40,000-50,000 50,000-70,000	Race: Hispanic Black Asian White Other	Median Age	Age Dist: 12-17 18-34 35-49 50-64 65+	ACD/m1h ACDA-13 6/4/90

#### Age

The age asked for was the age of the respondent who, according to the instructions, should have been the household member "age 12 or over whose birthday will come next", not necessarily the head of household. The median age reported was 36.2 years.

The highest median age reported was 52.4 for Outer Drive East, which, perhaps coincidentally, is also by far the oldest building of those surveyed. Twenty-eight percent were over 65 years old. The lowest median age was 29.4 years for Cobbler Square, followed by River City (30.5 years) and the Transportation Building (32.4 years).

#### TRAVEL BEHAVIOR

Although, as will be noted later in this report, there are some interesting anomalies in the data, in general survey results tend to confirm the locally-oriented travel behavior of downtown residents, namely:

- People who live downtown tend to work downtown.
   Of all respondents, 68.7 percent said their work
   locations were in the downtown zip codes of
   60601 through 60607, 60610 or 60611.
- Downtown residents take advantage of their proximity to work, with walking being the leading work trip mode at 38.7 percent. Drive own car and ride CTA are tied for second place at 23 percent.
- 3) Even when considering only Central Area zip codes, there is a strong tendency to work close to home, with the home zip code of each building usually ranking first or second in percentage of work locations. Percentages drop off sharply with additional trip distances of only a few blocks.

#### Geographic Distribution of Work Trips

As a first step in analyzing the data, 14 maps were prepared (Figures 3-16). Figure 2 depicts Central Area Zip Code boundaries, while Figure 3 shows the location of each of the 13 buildings surveyed, and the percentage of all persons who work outside their homes who have work locations in downtown zip codes.

It is somewhat surprising that the zip code with the highest concentration of work locations is 50606, extending westward from Wells Street between Kinzie and Van Buren. It should be noted that this zip includes Presidential Towers with, by far, the highest absolute number of respondents of any building.

Figure 2 Central Area Zip Code Boundaries

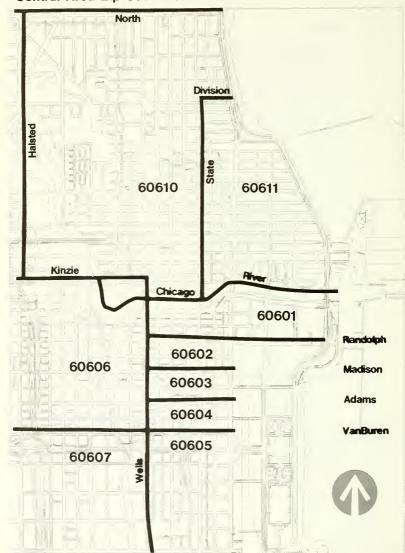
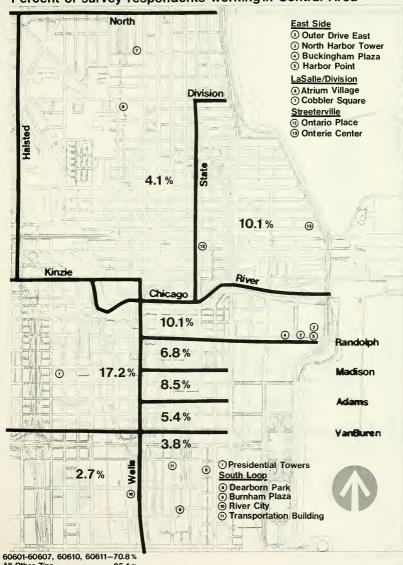
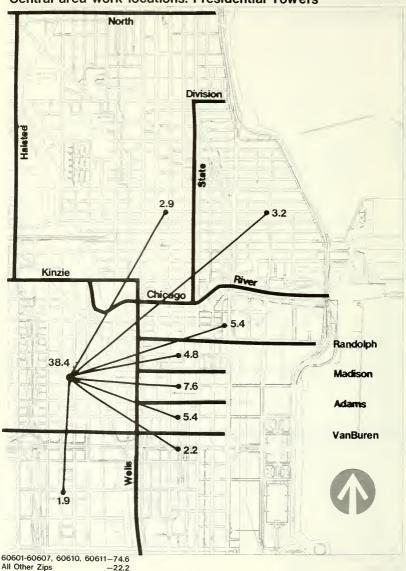


Figure 3
Percent of survey respondents working in Central Area



60601-60607, 60610, 60611-70.8 % All Other Zips -25.4 % No Answer - 3.8 %

Figure 4
Central area work locations: Presidential Towers

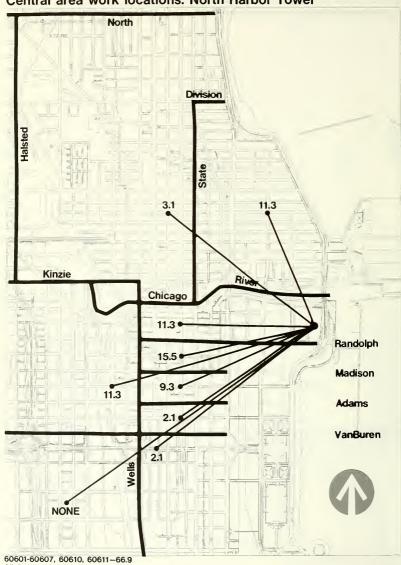


No Answer

-3.2

Figure 5 Central area work locations: Outer Drive East North **Division** Halsted 15.1 3.2 Kinzie Chicago 19.8 Randolph 7.9 Madison 6.5 Adams 8.7 **VanBuren** 1.6 2.4 60601-60607, 60610, 60611-68.1 All Other Zips No Answer -0.8

Figure 6 Central area work locations: North Harbor Tower



All Other Zips -29.0 No Answer -4.1

Figure 7
Central area work locations: Buckingham Plaza North Division 8.5 Kinzie 16.9 Randolph 5.6 Madison 12.7 12.7 **Adams VanBuren** 60601-60607, 60610, 60611-73.2 All Other Zips -24.0

No Answer

- 2.8

Figure 8 Central area work locations: Harbor Point North Division 9.5 1.7 Kinzie Chicago 17.2 Randolph 7.8 Madison 11.2 7.8 **Adams** 6.0 **VanBuren** NONE NONE

60601-60607, 60610, 60611—61.3 All Other Zips —33.5 No Answer — 5.2

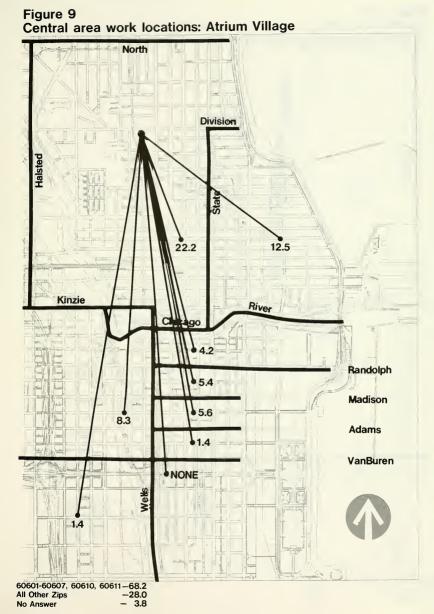
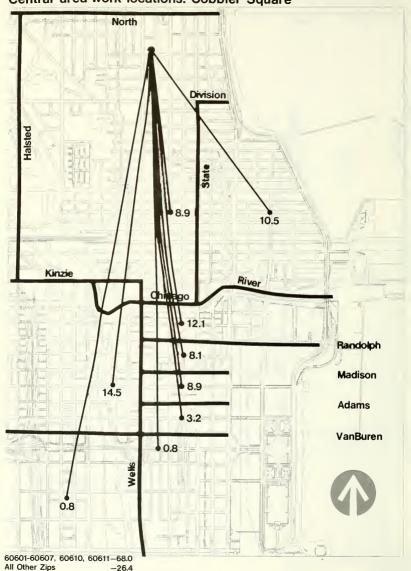


Figure 10 Central area work locations: Cobbler Square



All Other Zips -26.4 No Answer - 5.6

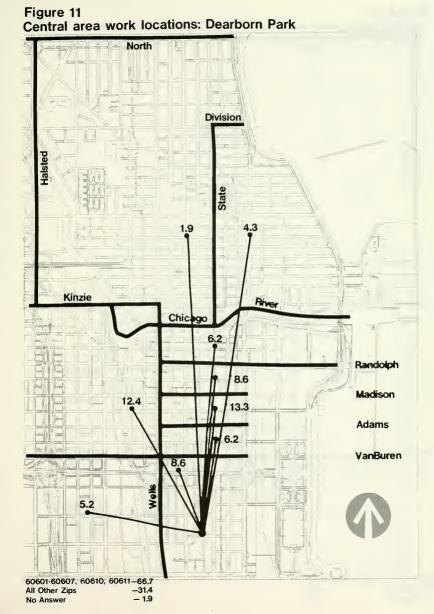


Figure 12 Central area work locations: Burnham Plaza North Division Halsted State NONE 8.3 Kinzie Chicago 6.3 Randolph 8.3 12.5 Madison Adams **VanBuren** 20.8 2.1 60601-60607, 60610, 60611-62.4 All Other Zips

-25.1

-12.5

No Answer

Figure 13 Central area work locations: River City North Division Halsted 6.0 NONE Kinzie Chicago 98.3 Randolph 17.9 Madison **Adams** 10.7 VanBuren 13.1

60601-60607, 60610, 60611-69.0 All Other Zips -23.9 No Answer -7.1

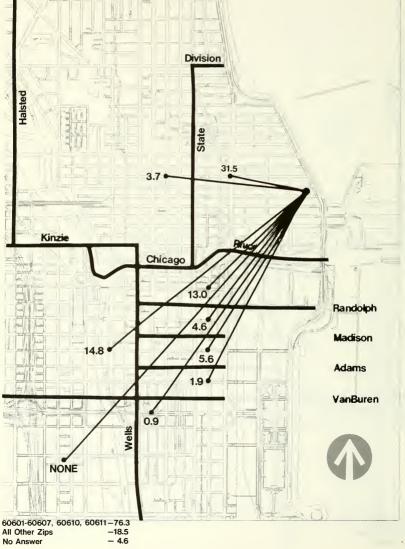
Figure 14 Central area work locations: Transportation Building



No Answer -13.0

Figure 15 Central area work locations: Ontario Place North Division 7.9 26.3 Kinzie Randolph 5.3 Madison 13.2 6.6 Adams 6.6 VanBuren 60601-60607, 60610, 60611-77.8 All Other Zips -18.3No Answer -3.9

Figure 16 Central area work locations: Onterie Center North Division Halsted State 31.5 Kinzie Chicago



Figures 4-16, prepared for each of the 13 buildings, show Central Area zipcode work locations for that building, related trip lengths and suggest, to some degree, ease of access to those locations via CTA and other modes. In general, these maps support the short-trip tendencies mentioned above.

It should be noted that the 60654 zip code was initially aggregated in the category "60618 or higher". In later analysis, this downtown zip, which includes the Merchandise Mart and the Apparel Center, may be separated out and analyzed.

#### Work Trip Mode by Market Area

Table 3 shows work trip mode for each of the 13 buildings and for total respondents. The separate buildings are also grouped by the 5 market sub-areas as follows:

- East Side; Outer Drive East, Harbor Point, Buckingham Plaza, North Harbor Tower
- 2) LaSalle/Division; Atrium Village, Cobbler Square
- South Loop; Dearborn Park, Burnham Plaza, River City, Transportation Building
- 4) Streeterville; Ontario Plaza, Onterie Center
- Presidential Towers; represents West Loop by itself

In Table 4, buildings within market sub-areas were aggregated to sharpen the differences among the sub-areas.

- For the LaSalle/Division area, farthest from the Loop, CTA use was highest (43.9 percent vs. 23.0 percent average for all buildings) and percent walking was lowest (15.8 percent vs. 38.7 percent average).
- 2) Percentage of Streeterville residents using taxis (15.8 percent vs. 8.5 percent average) is surprising. Similar taxi usage (12.2 percent) on the East Side is less surprising, because of the geographic remoteness of these buildings.
- 3) The high percentage of walkers among South Loop residents (44.7 percent vs. 38.7 percent average for all buildings) is noteworthy but explained by the very small percentages who work north of the river (see Figures 11-14).

TABLE 3

# WORK TRIP MODE BY BUILDING

ILLE ONTERIE  CENTER	108	25 23.1	20	0.0	46	16 14.8	0.9	0.0	0.0
STREETERVILLE  ONTARIO  ONTE	100.0	21.1	20 26.3	0.0	31.6	13	1.3	1.3	1.3
TRANSP.	54	15   Z7.8	12 2.2	0.0	26	1.9	0.0	0.0	0.0
RIVER	84 100.0	16 19.0	13.1	1.2	40.5	1.2	21 25.0	0.0	0.0
	48	18.8	31.3	2.1	19 39.6	6.3	0.0	2.1	0.0
SOUTH LOOP	210 100.0	55 26.2	46 21.9	1.0	98	1.9	0.5	1.9	0.0
~	124	34 ]	56	0.8	13.7	8.9	0.0	3 2.4	1.6
LASALLE/DIVISION  ATRIUM  COBBLE  VILLAGE  SQUARE	100.0	20 28.6	30 42.9	2.9	20.0	1.4	0.0	1.4	2.9
HARBOR	113	30	34	0.0	25.7	13.3	0.0	1.8	2.7
	171	16.9	18   25.4	0.0	33.8	16 22.5	0.0	0.0	1.4
N. HARBOR BUCK.	97	27.8	27.8	0.0	82.82	9.3	0.0	2.1	3.1
EAST SIDE	126 100.0	37	23.0	0.0	26 20.6	10 7.9	15.1	3.4	1.6
PRES.	315	48	9.2	2.5	194	28 8.9	0.3	1.0	1.3
TOTAL	1496	344	347	1.0	38.8	128	2.9	1.3 28	18
	PREQ.	PREQ.	PREQ.	FREQ. PERCENT	FREQ. PERCENT	FREQ. PERCENT	FREQ. PERCENT	FREQ. PERCENT	FREQ.
	AORK OUTSIDE	OR.L.	CTA	METRA	WALK	TAXI	SHUTTLE	OTHER	NO ANS.

TABLE 4
WORK TRIP MODE BY MARKET AREA

		TOTAL	PRES.	EAST	LASALLE/ DIVISION	SOUTH	STREETER-     VILLE
WORK OUTSIDE	FREQ	1499	315	409	195	396	100.0
DRIVE	FREQ.	344	15.2	106	54	24.0	22.3
ста	FREQ. PERCENT	347	9.2	108	86	21.2	21.7
METRA	FREQ. PERCENT	1.0	2.5	000	1.5	1.0	000
WALK	FREQ. PERCENT	580	194	108	31	177	38.0
TAXI	FREQ. PERCENT	128 8.5	28	12.2	12 6.2	2.3	29
SHUTTLE	FREQ. PERCENT	44 2.9	0.3	19 4.6	0.0	22 5.6	1.1
OTHER	FREQ.	20	1.0	1.7	2.1	1.3	0.5
NO ANS.	FREQ.	21	1.3	2.7	2.6	00.0	0.5

#### Non-Work Travel

Central Area residents undertake substantial levels of travel to destinations within the downtown area each week, for a variety of purposes. Table 5 summarizes the frequency of these trips, for shopping/entertainment, personal visits or appointments, and other (non-work, non-school) purposes. The most frequent non-work trip to the Central Area is for shopping and entertainment purposes, with 83.4% survey respondents indicating at least one such trip per week. More than half indicated making such trips one to three times per week, while nearly 30% indicated at least 4 such trips per week.

Personal business and other non-work trip purposes show lower frequency of travel to the Central Area, as indicated in Table 5. The most common weekly frequency is one to three times per week, with 35% of respondents indicating that frequency for personal business travel, and 27% indicating that frequency for other non-work/non-school purposes. Less than once a week, or relatively infrequent travel, is at an even higher rate (nearly 45%) for each of these trip purposes.

#### Travel Mode by Trip Purpose

In general, as indicated in Table 6, the proportion of total trips made via CTA for work purposes (23.0 percent) is comparable with the figures for shopping/entertainment (21.0 percent) and personal visits (22.3 percent). Use of taxis for these latter purposes (22.0 percent and 18.2 percent) appears significantly higher than taxi use for work trips (8.5 percent). The proportion driving for work trips (23.1 percent) is only slightly (perhaps not significantly) higher than those driving for shopping/entertainment (18.9 percent) and personal visits (18.7 percent). 28.4 percent of school trips were made by transit, as well as a lower proportion (17.2 percent) of other non-work trips.

#### HOW CAN CTA IMPROVE SERVICE?

Nearly half (43%) of survey respondents indicated that they were very familiar with CTA bus or train service (or both), while another 35% indicated they were somewhat familiar. This suggests substantial exposure of Central Area residents to the availability and routing of CTA transit services.

42% of survey respondents also indicated that they used CTA bus or rail services at least occasionally, with about a third of this group riding infrequently (less than once per week) and another third riding one to four times per week. The remaining third fell into three more or less

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### NON-WORK TRIP FREQUENCIES: CENTRAL AREA TRAVEL

WEEKLY Frequency	TRIP PURPOSE								
		ing & ainment	Personal Visits or Appointments		Other Non-Work Non-School				
	No.	Percent of Trips. Made		Percent of Trips Made	No.	Percent of Trips Made			
More than 6 trips	163	9.3%	128	7.5%	117	7.5%			
1-6 Trips	335	19.2	143	B.4	113	7.2			
1-3 Trips	960	54.9	592	34.7	427	27.3			
Less than 1 trip	271	15.5	743	43.5	698	44.6			
Never	19	-	101	-	211	-			
Oon't know/no answer	49	-	90	-	231	-			
TOTAL	1797	100.0%	1797	100.0%	1797	100.0%			

TABLE 6
TRAVEL MODE BY TRIP PURPOSE:
TOTAL RESPONDENTS

		WORK	SHOPPING/ ENTERTNMT		school	OTHER
TOTAL	FREQ. PERCENT	1488 100.0	1797 100.0	1797 100.0	229 100.0	1797 100.0
	FREQ. PERCENT	348 23.4	340 18.9	336 18.7	45 19.7	336 18.7
CTA	FREQ. PERCENT	347 23.3	377 21.0	401 22.3	65 28.4	309 17.2
METRA	FREQ. PERCENT	15 1.0	0.1	13 0.7	3 1.3	22 1.2
WALK	FREQ.	583 39.2	507 28.2	466 25.9	87 38.0	371 20.6
TAXI	FREQ. PERCENT	128 8.6	395 22.0	324 18.0	17 7.4	289 16.1
SHUTTLE	FREQ. PERCENT	24 1.6	55 3.1	43 2.4	1.7	27 1.5
OTHER	FREQ. PERCENT	25 1.7	66 3.7	52 2.9	3 1.3	64 3.6
	FREQ.	18 1.2	49 2.7	97 5.4	5 2.2	255 14.2
	FREQ.	0.0	0.3	65 3.6	0.0	124 6.9

equal sub-groups: those riding more than ten times per week, suggesting work travel as well as other trip purposes; those riding ten times per week (probably trips to and from work); and those riding five to nine times per week (some taking transit to work only some of the time).

The concluding question on the survey asked for any comments on how CTA can improve its services, and 52.2% of the respondents chose to write down one or more suggestions. Grouping and categorization of these responses indicated that the following areas were mentioned most frequently:

- -- better security (28.4% of respondents making suggestions)
- -- better, more courteous personnel (16.6%)
- -- add more buses/trains at peak hours (15.1%)
- -- extend service to other areas (11.4%)
- -- cleaner buses (11.0%)
- -- maintain schedules, be on time (10.9)
- -- cleaner trains (8.3%)
- -- cleaner, better maintained stations (4.9%)

In addition, 17.3% of those suggesting improvements addressed a variety of other scheduling or timing issues, and another 10.0% mentioned non-specific maintenance improvements.

#### REPRESENTATIVE RESIDENTIAL DEVELOPMENTS

#### Presidential Towers

This four-tower complex on the near westside is treated as a market area unto itself due to its sheer size (2,346 units) and the relative scarcity of other comparable residential development in the area. It also distinguishes itself in terms of several travel behavior measures.

- 61.6 percent of respondents said they walked to work, compared to an average of only 32.6 percent for the other twelve buildings
- Only 9.2 percent said they take CTA to work, compared to a 26.5 percent average for the other twelve buildings

 38.4 percent, highest of all buildings, said they worked in their home zip code. Second was 31.5 for Onterie Center. Third was 26.3 for Ontario Place.

Each of these latter two developments and Presidential Towers are relatively new, even by Central Area standards, completed in 1985, 1984 and 1986, respectively. (Outer Drive East, by comparison, is about 20 years old). In future analysis, perhaps building age can be considered relative to such variables as respondent age, length of residence in Central Area and income. These may indicate a changing relationship with mode choice (fewer walk trips, greater transit potentials) as the average age of building residents increases. The latter, however, is also a function of resident turnover.

With regard to travel mode by trip purpose for Presidential Towers (see Table 7), the result of greatest interest is that the proportion of trips made by taxi (for work, only 8.9 percent) rises dramatically for shopping/entertainment (35.2 percent) and for personal visits (26.3 percent). Also, the proportion of residents walking drops from 61.6 percent for work trips to 24.4 percent for shopping/entertainment and 27.7 for personal visits.

This suggests there may be a market for some sort of off-peak and/or weekend shuttle service to shopping and entertainment destinations, if it could compete with taxis in terms of price and convenience. It would be interesting to get further data as to whether residents are basically satisfied with this situation or might be willing to try something new.

#### Atrium Village

This development is of particular interest because of its ethnic and economic diversity compared to other Central Area residential complexes. It was developed by a consortium of five Near North Side churches, three of these with predominantly black congregations, to serve as a "bridge" between the affluent areas to the east and the Cabrini-Green public housing projects to the west. The complex includes a 207-unit mid-rise building (studios, 1 and 2 bedrooms; adults only) and 100 low-rise 2 and 3 bedroom units intended mainly for families.

Leasing guidelines maintain a mix of about 50 percent of the tenants paying market rate rents; 30 percent paying discounted "basic" rents, and 20 percent receiving deep rent subsidies. About half the tenants are black. All apartments have such amenities as dishwashers and full carpeting.

TABLE 7

## MODE BY TRIP PURPOSE: PRESIDENTIAL TOWERS

OTHER	361	19.9	13.6	1.1	20.2	81 22.4	00.0	3.0	9.7	36
SCHOOL	100.0	8.1	19.4	00.0	30	14.5	3.2	3.2	3.2	0.0
PERSONAL VISITS	361	71 19.7	52	1.1	100 27.7	95 26.3	0.0	2.5	3.3	18
SHOPPING/  ENTERTNMT	361	70	53	00.0	88 24.4	35.2	0.0	3.3	2.5	0.6
WORK	315	15.2	29	2.5	194	28	0.3	1.0	1.3	00.0
WORK; ALL  BUILDINGS	1488	348	347	1.0	583	128	24	1.7	1.2	00.0
	FREQ.	FREQ.	FREQ.	FREQ.	FREQ.	FREQ.	FREQ. PERCENT	FREQ.	FREQ.	FREQ.
	TOTAL	DRIVE CAR	CTA	METRA	WALK	TAXI	SHUTTLE	OTHER	NO ANS.	NEVER DO IN CBD

Two analytical approaches were used. First, the travel patterns of Atrium Village were compared all thirteen survey buildings as a group (see Table 8). Also, for greater specificity, Atrium Village data was compared to data from Cobbler Square, a nearby market-rate building.

As noted earlier in Table 3, in these two LaSalle/Division buildings, located farthest from the Loop of those surveyed, CTA use was highest of all buildings and percent walking was lowest. When the two buildings are compared to each other, these patterns continue to hold. There does appear to be a marginal difference in the balance between walking and taxi use. Of the Cobbler Square work trips, 8.9 percent were made by taxi vs. only 1.4 percent for Atrium Village. Atrium Village tenants made 20 percent of their work trips by walking vs. 13.7 percent for Cobbler Square. Percentage of use for all other modes was virtually identical.

#### Dearborn Park

This development was given special scrutiny because its configuration would seem to suggest a greater mix of household sizes and compositions than typical of the Central Area. The complex consists of townhouses, mid-rise and high-rise apartments, including a building specifically for the elderly, aligned along suburban-type cul-de-sacs on a 51-acre site. On its southern edge is one of downtown's only public elementary schools.

The only travel behavior distinctions for Dearborn Park were a somewhat higher percentage of work trips by walking (46.7 percent vs. 38.7 percent for all buildings) and a lower share of work trips via taxi (1.9 percent for Dearborn Park vs. 8.5 percent for all buildings). Table 9 compares work trip mode for all 4 complexes contained in the South Loop sub-area.

This exercise did prompt a closer look at Dearborn Park's relationship with its market-area peers. It was noted that it and the Transportation Building had relatively higher percentages of walkers than Burnham Plaza and River City, and lower transit use (in River City's case, including private shuttle mini buses). Since all four buildings are about the same distance from the Loop, this suggests that physical and/or psychological barriers, not just distance, may be significant factors.

In the case of Burnham Plaza, someone walking to the Loop may be likely to cross under the el structure and, if proceeding north on State St., pass in front of the Pacific Mission. Walking from River City could involve travelling a long, undeveloped stretch of Wells St. or under the Rock Island viaduct. These pedestrian routes are somewhat intimidating. The other two South Loop buildings are located along less intimidating Dearborn St. One could reasonably speculate these factors could especially impact walking in evening and weekend periods.

TABLE 8

WORK TRIP MODE FOR
LASALLE/DIVISION SUB-AREA

		TOTAL	ATRIUM    VILLAGE	COBBLER     SQUARE
WORK OUTSIDE	FREQ.	1499	71 73.2	124    174.6
DRIVE CAR	FREQ.	344   22.9	20 20 20 20 20 20 20 20 20 20 20 20 20 2	34    47.9
CTA	FREQ.	347 23.1	30.9	56    78.9
METRA	FREQ. PERCENT	15 1.0	2   2.1	1
WALK	FREQ. PERCENT	580 38.7	14	17    23.9
IXAT	FREQ. PERCENT	128   8.5	1.0	11    15.5
SHUTTLE	FREQ. PERCENT	44 2.9	0.0	0.0
OTHER	FREQ. PERCENT	20   1.3	1.0	3
NO ANS.	FREQ.	21	3 1	2    2.8

TABLE 9
WORK TRIP MODE FOR SOUTH LOOP SUB-AREA

		TOTAL	DRBRN   PARK	BURNHAM	RIVER CITY	TRANSP.      BLDG
	FREQ.	1499 100.0	210	48 100.0	84 100.0	54    100.0
DRIVE CAR	FREQ.	344 22.9	55 26.2	18.8	16 19.0	15   27.8
CTA	FREQ.	347 23.1	46 21.9	15 31.3	11 13.1	12   22.2
METRA	FREQ.	15 1.0	1.0	1 2.1	1.2	0.0
WALK	FREQ.	580 38.7	98	19	34 40.5	26   48.1
TAXI	FREQ.	128 8.5	1.9	6.25	1 1.19	1.85
SHUTTLE	FREQ.	44 2.9	1 0.5	0.00	21 25.00	0.00
	FREQ.	20 1.3	1.9	1 2.1	0.0	0.0
NO ANS.	FREQ.   PERCENT	21	0.0	0.0	0.0	0.0

#### Shuttle vs. Non-Shuttle Buildings

Two of the buildings surveyed offered private shuttle service for their residents, Outer Drive East and River City. Although, as shown in Table 10, the mode split for these shuttles was significant (15.1 and 25.0 percent respectively), the impacts on other modes relative to market-area peers was mixed. Walking drops from 40.3% to 28.6% for shuttle-served buildings, and usage of CTA and taxi is also less than the building average for the overall survey. However, usage of the private auto is higher than the survey average for the shuttle-served buildings, and does not appear to have been impacted by shuttle availability. This issue should be studied further.

### CONCLUSIONS

The Central Area of Chicago is one of the most rapidly changing portions of the region. The rapid growth in residential development experienced in the past ten years is expected to continue until the end of the decade, and perhaps beyond. Transit market potentials in this expanding area are of critical importance.

A major ongoing interagency planning/design project is currently examining the feasibility and cost associated with a downtown circulator system, in recognition of both rapid employment growth and associated increasing automobile traffic congestion.\* Such a circulator system would both facilitate the distribution of downtown work trips from commuter rail stations, rapid transit terminals, and major parking facilities, as well as non-work circulation during the mid-day. It would also enhance the travel options available to Central Area residents, for both work and non-work travel.

However, given the scattered distribution of the residential developments surveyed in this study, and the location of other existing and potential residential development along the edges of the Central Area, the proposed circulator system will serve only a portion of the potential residential travel demand. In fact, the existing CTA bus and rail system, supplemented by both public and private shuttle bus services, will provide the bulk of the transit service that offers viable non-automobile, non-taxi travel alternatives.

Under these conditions of rapidly growing travel demand within the Central Area, including travel demands generated by residential developments, the following conclusions emerge from the survey.

<sup>\*</sup> Metropolitan Planning Council, <u>A Light-Rail Transit</u> System for Chicago's Central Area, December, 1989.

TABLE 10

# WORK TRIP MODE: SHUTTLE VS NON-SHUTTLE BUILDINGS

		TOTAL		NON-SHTLE   BUILDINGS
WORK OUTSIDE	FREQ.	1499 100.0	210	1289
DRIVE CAR	FREQ.	344 22.9	53	291 22.6
CTA	FREQ.	347 23.1	40 19.0	307
METRA	FREQ.	15 1.0	0.5	14
WALK	FREQ.	580   38.7	60	520
TAXI	FREQ.	128 8.5	11 5.2	117   9.1
SHUTTLE	FREQ.	2.9	40 19.0	0.3
OTHER	FREQ.	20 1.3	3	17 1.3
NO ANS.	FREQ.	21	1.0	19

- The relatively high response rate to the survey suggest high interest in the topic of transit. That, combined with the geographic concentration of the downtown residential population, suggest that marketing efforts targeted at downtown residents could increase CTA's market share. Both work and non-work travel markets should be pursued.
- 2. There is some indication that physical and/or physiological barriers, not just distance, may effect willingness to make a trip by walking. Presumably so would weather. This suggests substantial variability in day-to-day travel behavior, reflected in the high levels of occasional use of transit for work and non-work trips.

Presently the taxi is probably the most convenient "impulse" alternative to walking, but CTA might increase its attractiveness by, for example, placing token machines in building lobbies and having convenient maps and schedules posted.

3. The off-peak travel market is of particular interest, because it is at these times that available capacity exists on bus and rail modes. Increased ridership can be accommodated with no increase in operating costs. Off-peak travel by Central Area residents is extensive and significant potentials exist to increase transit's share.

Before this is possible, however, attention must be given to addressing some of the key suggestions offered for improving CTA service, particularly making CTA's recent improvements and programs regarding security more widely known, and continuing these efforts at security enhancement. CTA has already implemented programs to improve operator/conductor/ticket agent communication skills (Red Carpet service), and these efforts should also be continued. As newly ordered bus and rail vehicles are put in service in the forthcoming years, they should also be promoted, together with associated improvements in service quality, including on-time performance.

4. Even if a circulator system is built, considerable potential will continue to exist for publicly or privately provided bus shuttles between major destination points. Attachment B covers a proposal for this kind of shuttle service, in this instance a possibly bus shuttle route to operate between Presidential Towers on the Near West and four apartment towers on the east end of Randolph Street. The market for such shuttles, and associated fares and operating arrangements, should be examined further.

- 5. CTA ridership for the LaSalle/Division sub-area is relatively higher, at least for work trips. The overall market in this area can be expected to grow as the now vacant, former urban renewal land south of Atrium Village fills in with residential development (construction now underway). Service requests and requirements from this area merit detailed evaluation, particularly because it is an example of residential development at the <a href="fringes">fringes</a> of the Central Area, occurring to the west and south as well.
- 6. Further analysis should be given to the considerable transit market expansion potential associated with projected residential growth in the Central Area. The Northeastern Illinois Planning Commission has forecasted that total Central Area population will increase within a range of 75 and 84 percent in the 15 years ending in year 2010.

Much of this growth will occur where longer average work as well as non-work trips are necessary, implying less potential walking, and more potential travel by taxi/transit modes. For traffic congestion, air quality, and environmental reasons, increases in automobile travel should be avoided wherever possible, offering a major challenge to the transit providers in the region to provide viable alternatives.

- 7. For Presidential Towers, taxi use is much higher for non-work than for work trips. This may represent a market for transit travel for entertainment or shopping destinations, which might apply for other residential developments as well. Again the perceived security issue must be better addressed to increase transit attractiveness.
- 8. Participation of residential building managers was greatly appreciated, and in some instances considerable interest was expressed in stimulating transit improvements that could better serve building residents. Because building management has an interest in the overall satisfaction and amenity levels for residents, opportunities also exist to work further with building managers to improve the availability of information on transit services, and to enlist their support in the promotion of transit as a low-cost, convenient, and non-polluting (in relative terms) alternative to automobile travel.



Robert E. Paaswell Executive Director Chicago Transit Authority

Merchandise Mart Plaza, P.O. Box 3555 Chicago, Illinois 60654 (312) 664-7200

December, 1988

#### Dear Central Area Resident:

Simmons Market Research Bureau has been asked to carry out a survey about the transportation needs and preferences of people living in the central area of Chicago. For your reference, the Central Area boundaries are Roosevelt on the south, North Avenue on the north. Halsted on the west and Lake Michigan on the east.

Since your home is part of a small carefully selected sample, it is very important to the success of this study that a member of your household fill out the enclosed questionnaire and return it as soon as possible.

You will find that it can be completed very quickly by circling most answers and writing-in a few answers.

If more than one person lives in your household, please have the person age 12 or over whose birthday will come next fill out the questionnaire.

For example, if there are three people age 12 or over in your household with the following birthdays:

#### Birthday

Husband...... December 19 Wife...... January 9 Tecnager..... April 1

Then, the person with the next upcoming birthday (the husband) would fill in the questionnaire.

To ensure that the replies truly reflect the opinions of all, we ask that we hear from your household, regardless of how interested you may be in any of the issues discussed.

Thank you for your help with our survey. For your convenience, we have enclosed a postage-paid envelope for the return questionnaire.

Sincerely,

Robert E. Paaswell Executive Director

P.S. Simmons Market Research Bureau is eaclosing one dollar as a token of our appreciation. Once again, thank you. Your help is very important to us.

Simmons Market Research Bureau Eastpointe Corporex Park 3802 Corporex Drive Tampa, Florida 33619

Respo	ndent 1D # C2470
(	1-5)

December, 1988 #C-0464

6-1

## CENTRAL AREA RESIDENTIAL SURVEY

(Boundaries are:	Roosevelt (south)	North Avenue	(north) Halste	d (west) a	nd Lake	Michigan	(east)]
------------------	-------------------	--------------	----------------	------------	---------	----------	---------

(To Be Filled Out By The Household Member Whose Birthday Is Next)

la. Do you regularly go to work outside your home -- that is, either part time or full time?

Circle One Answer (7)

Yes.......1----> (PLEASE ANSWER Q.1b-1e) No.......2---> (PLEASE SKIP TO Q.2a)

Circle One

1b. In an average week, about how many days do you go to work outside your home?

Number of work days per week:

(PLEASE WRITE-IN NUMBER)

lc. How do you usually travel to work from home?

10-

ld. Where is the main area where you work?

le. What is the zip code where you work	le.	What is	the zip	code	where	vou	work
---	-----	---------	---------	------	-------	-----	------

Your work zip code:		(12-16
	(PLEASE WRITE-IN)	

2a. Are you currently enrolled in any school or college?

Circle One Answer (17)

Yes......1---> (PLEASE ANSWER Q.2b-2e)
No......2---> (PLEASE SKIP TO Q.3a)

2b. In an average school week, about how many days do you go to school or college?

Number of school or college days per week:

(PLEASE WRITE-IN NUMBER)

(18)

2c. How do you usually travel to school or college?

	Circle One Answer (19)
Drive in your car	1
Travel as a passenger in someone	
else's car	2
or both	3
Fravel by commuter rail	4
Walk all the way	5
Bicycle or motorcycle	6
Take a taxi	7
Take a private shuttle or van servic	
Some other way (PLEASE DESCRIE	E):
	0

2d. Where is the main area where you attend school or college?

	Circle One Answer (21)
Central area of ChicagoIn Chicago, but not in the central	
Suburbs	3

2e. What is the zip code of your school or college?

Zip code of your school or college:		(22-26)
•	(PLEASE WRITE-IN)	

## (EVERYONE PLEASE ANSWER THE FOLLOWING QUESTIONS.)

3a. For each of the purposes shown below, please circle about how often you take trips for that purpose in the central area of Chicago?

	Purpose	s of Trips in the Central	Area			
	Personal Visits					
		or Appointments For Example, Doctor	Other Reasons			
	Shopping and Entertainment	Hairdresser, Barber Friends, Family	Not including Work or School			
	(One Answer)	(One Answer)	(One Answer)			
How Often						
	(27)	(28)	(29)			
More th	an 6 times					
a week	1	1	1			
4-6 time	s a week2	2	2			
1-3 time	s a week3	3	3			
Less tha	n once a					
week	4	4	4			
Never	5	5	5			

3b. For each purpose shown below, please circle the way you usually travel there when it is in the central area of Chicago.

	Shopping and Entertainment (One Asswer)	of Trips in the Cen Personal Visits or Appointments For Example, Doctor, Hairdresser, Barber, Friends, Family (One Answer)	Other Reasons Not including Work or School (One Answer)
How You Usually Go	(30)	(32)	(34)
Drive in your car Travel as a passenger in	·1	1	1
someone else's carTravel by CTA		2	2
that is bus or rail or both Travel by commu		3	3
rail Walk all the way.	4 5	4 5	4 5
Bicycle or motoro Take a taxi Take a private shuttle or van		6 7	6 7
service	8	8	8
Some other way (PLEASE DESCI		9	9
Never do this in central area		0 .	0
	(31)	(33)	(35)

4. How long have you lived within the central area of Chicago?

5.	altogether, in a typical week, about how many times do you board a CTA bus or train in the
	central area of Chicago?

	(37)
fore than 10 times a week	1
0 times a week	
-9 times a week	3
-5 times a week	4
ess than once a week	
Never	

6. How would you rate the <u>CTA hours of operation</u> for satisfying your own needs for travel within the central area of Chicago?

	Circle One Answer (38)
Excellent	4
Good	3
Fair	
Poor	1

7. How familiar do you feel you are with the CTA bus and train service within the central area of Chicago?

8. To the best of your knowledge, what is the price for a trip (without a transfer) on a CTA bus or train in the central area of Chicago?

> Bus Fare: \$ ... (40) (41) (42) (PLEASE WRITE-IN)

Circle One

Thank you for your help. We would like to know a few things about you to help us be sure that our survey represents all groups of people.

9a.	What is the zip code of your resider	0007
	made in the dip edge of your resider	(46-50) (PLEASE WRITE-IN)
		,
	(51)	
9b.	Are you Male1	Female2
	1020	remaic
	(52)	
9c.	Are you Hispanic1	Asian3
	Black2	White4
		Other5
	(53)	
9d.	Is your age 12-171	35-493
	18-342	50-644 65 or over5
		os or over
e.	In total, including yourself	(WRITE IN NUMBERS)
	How many people li	ve in your household (54)
	How many	are ages 18-34(56)
	How many	are ages 12-17(57)
	Now many	are under 12 years of age (58)
f.	Into which of these categories does y	your total household income for last year fall?
	(59	)
	\$10,000 or under1	\$40,001 - \$50,0005
	\$10,001 - \$20,0002	\$50,001 - \$70,0006
	\$20,001 - \$30,0003 \$30,001 - \$40,0004	\$70,001 or more7
	330,001 - 340,0004	

Central Area Resident Main Questionnaire

Job #C-0464 Page 7

Any comments on l	how CTA	can improve	its service:
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61
-
60 61 62 63 64
64
0

## THANKS AGAIN FOR YOUR HELP.

65-68-66-69-67-70-

71-80Z

Please be sure you have answered all questions, then use the postage-paid return envelope provided to send your completed questionnaire to:

> SIMMONS MARKET RESEARCH BUREAU, INC. EASTPOINTE CORPOREX PARK 3802 CORPOREX DRIVE TAMPA, FLORIDA 33619



# ATTACHMENT B

Date: February 29, 1988

To: Harold R. Hirsch, Manager, Operations Planning

From: Darwin G. Stuart, Manager, Strategic Planning

120

Re: Central Area Shuttle Bus Options

The attached proposal is an example of the <u>kinds</u> of bus route reorganization that appear to merit further investigation, as a part of CTA's Central Area surface bus transit planning. Many such route changes would probably make sense, in response to the expanding boundaries and changing land-uses of the Central Area.

Operations Planning could begin to sketch out additional proposals of this type, <u>exploratory in nature</u>, as a part of work of the CTA Downtown Transit Study Group. Such low-cost options are also likely to be of interest to the MPC Central Area Distributor Study, about to begin.

Attachment

DGS/ls



Date: February 17, 1988

To: Darwin G. Stuart, Manager, Strategic Planning

From: Alan C. Douglas, Program Planning Analyst

Re: Downtown Service Proposal

## General Background

Recent review of extensive data from several sources has documented the following significant trends in Chicago's central area:

- Chicago's central area has become a functionally mixed self-contained market for transit service, rather than just a "central business district".
- 2) Residential development has been particularly significant; half of all residential building permits issued in Chicago for the last 7 1/2 years were for the downtown area.
- While these trends place new demands on CTA service, they also offer new opportunities, i.e., new markets, new infrastructure, etc.
- CTA's downtown shuttle system, which now functions almost solely to distribute suburban commuters from their train stations to their offices, should be reconsidered.

## Proposal

In response to these trends it is suggested, for discussion purposes, that a new, residentially-oriented shuttle bus route between Presidential Towers and the Harbor Point/Outer Drive East (HP/ODE) area be studied in detail, with a view toward possible implementation on a demonstration basis (see map).

There are several apparent, promising aspects to this proposal:

- A simple, easily understood, easily marketed cross-loop routing;
- 2) A large concentrated residential market on each end (see below);
- Several desirable interim destinations, including access to the IC, CNW and all CTA rapid transit routes;
- 4) A route short enough to be operated with good schedule adherence, taking terminal time at each end;
- 5) New concentrated markets, easily accessed by such direct marketing devices as printed timetables and route maps;

6) The possibility of operating economies elsewhere (discontinuing the HP/ODE leg of the 60 Blue Island bus, for example) or even getting building owners to subsidize our service.

#### Residential Units Served

Presidential Towers	2,346
Outer Drive East	940
Harbor Point	742
Buckingham Plaza	305
North Harbor Tower	
(175 N. Harbor Drive)	<u>600</u>
TOTAL.	4.933

## Possible Service Design (Preliminary)

It is suggested that the current HP/ODE service on route 60 Blue Island (north of Adams Street) be discontinued and replaced by new service between HP/ODE and Presidential Towers. For study purposes, assume the new service would operate on approximately the same frequency and hours of service as current HP/ODE service (see below).

### Current Route 60 Harbor Point Service

	<u>Hours of</u> <u>Service</u>	<u>Trips</u>	<u>Average</u> <u>Headway</u>
Weekday	0600-2300	108	15 mins.
Saturday	0600-2300	86	20 mins.
Sunday	0830-1800	57	17 mins.

#### Proposed New Route

	Est. Round Trip	Round Trip	Total Miles
	Running Time	Miles	Daily
Weekday	31	3.1	335
Saturday	27	3.1	267
Sunday	25	3.1	178

#### Estimated Route 60 Savings

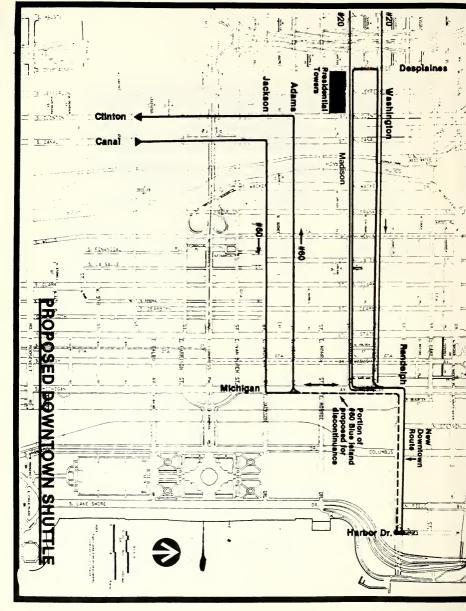
	Running Time Saved/Trip	Round Trip MIles Saved/Trip	Total Miles Saved Daily
Weekday	14-17 mins.	2.0	216
Saturday	10.5-15 mins.	2.0	172
Sunday	10-10.5 mins.	2.0	114

NOTE: Further savings may be possible from short-turning and/ or widening headways on Route 20 Madison.

# Next Steps (Illustrative): For this Kind of Proposal

- Operations Planning to review and comment on the general concepts and specific proposal.
- Arrange for a ridership check of Route 60 to determine the extent of thru-riding past Michigan/Adams. These people would be inconvenienced by this service change.
- Operations Planning to make detailed cost estimates of this proposal, perhaps including trial schedules.
- Begin discussions with Public Affairs and/or Marketing on promotional strategies and materials for this type of service.

ACD:df



## TECHNICAL REPORTS

## STRATEGIC PLANNING DEPARTMENT

No.	Title	Date	
SP89-01	1988 Ridership Review	May,	1989
SP89-02	CTA Household Travel Market Survey: Summary Report	April,	1989
SP89-03	Survey of Sunday Travel Patterns	March,	1989
SP89-04	Week-End Recreational Travel: Summary of Three Surveys	March,	1989
SP89-05	Red Carpet Service Survey Report	April,	1989
SP89-06	CTA 1986-88 Service Delivery (Title VI)	May,	1989
SP89-07	Characteristics and Transportation Attitudes of Downtown Chicago Pedestrians	April,	1989
SP89-08	1988 Market Surveys and Analysis Project: Executive Summary	June,	1989
SP89-09	Results of CTA Household Travel Market Survey	August,	1989
SP89-10	1987-1988 Annual Report	December,	1989
SP90-01	Adopt-A-Station Program	March,	1990
SP90-02	1989 Ridership Review	May,	1990
SP90-03	Culture Bus Rider Survey	May,	1990
SP90-04	O'Hare Corridor Work Travel Survey	May,	1990
SP90-05	Central Area Resident Travel Survey	June,	1990
SP90-06	O'Hare Airport Ground Travel Survey	June,	1990

